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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,166	02/12/2004	Bart Gerard Boucherie	BOUC3015/JEK	3778
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BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314				
			EXAMINER BALSIS, SHAY L	
			ART UNIT 1744	PAPER NUMBER

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/776,166

**Applicant(s)**

BOUCHERIE, BART GERARD

**Examiner**

Shay L. Balsis

**Art Unit**

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 21-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/12/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered. The applicant is asked to provide copies of EP 0972646 and EP 0972465 in the response to this Office Action.

### ***Specification***

The disclosure is objected to because of the following informalities:

On page 2, line 31, should this be EP 0.674.862? If not, the applicant is asked to submit a copy of EP 0.674.826.

Appropriate correction is required.

### ***Election/Restrictions***

Applicant's election of claims 1-20 in the reply filed on 5/31/06 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 21-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 5/31/06.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6837548. Although the conflicting claims are not identical, they are not patentably distinct from each other because ‘548 teaches a bundle of fibers provided in a brush body (lines 1-2 of claim 1). The ends of the fibers are subjected to a processing by bringing them into contact with processing equipment (the ends of the fibers are brought into contact with a cutting knife and the ends of the fibers are cut).

Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6406099. Although the conflicting claims are not identical, they are not patentably distinct from each other because ‘099 teaches a bundle of fibers provided in a brush body (lines 4-6 of claim 1). The ends of the fibers are subjected to a

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processing by bringing them into contact with processing equipment (the ends of the fibers are brought into contact with a heated punch).

Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 3-5 of U.S. Patent No. 6702394. Although the conflicting claims are not identical, they are not patentably distinct from each other because '394 teaches a bundle of fibers provided in a brush body (lines 1-2 of claim 1 and lines 1-2 of claim 5). The ends of the fibers are subjected to a processing by bringing them into contact with processing equipment (the ends of the fibers are brought into contact with a heating stamp).

Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6702394. Although the conflicting claims are not identical, they are not patentably distinct from each other because '394 teaches a bundle of fibers (lines 1-2 of claim 8). The ends of the fibers are subjected to a processing by bringing them into contact with processing equipment (the ends of the fibers are brought into contact with a heating stamp). '394 fails to teach that the fibers are fit within a brush body. It would have been obvious to place the fibers in a brush body so that the fibers can be used for an intended purpose. If the fibers are to be used for a toothbrush, then the brush body should be a toothbrush. Additionally a brush body will assist in holding the fibers in place when end rounding.

Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 14, 16 and 32 of U.S. Patent No. 6779851. Although the conflicting claims are not identical, they are not patentably distinct from each other because '851 teaches a bundle of fibers provided in a brush body (lines 4-6 of claim 1, lines 5-7 of claims 14, 15 and 32). The ends of the fibers are subjected to a processing by bringing them into contact

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with processing equipment (the ends of the fibers are brought into contact with an ultrasonic welding tool).

Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 and 2 of U.S. Patent No. 6372163. Although the conflicting claims are not identical, they are not patentably distinct from each other because '163 teaches a bundle of fibers (lines 1-3 of claims 1 and 2). The ends of the fibers are subjected to a processing by bringing them into contact with processing equipment (the ends of the fibers are brought into contact with an end rounding tool). '163 fails to teach that the fibers are fit within a brush body. It would have been obvious to place the fibers in a brush body so that the fibers can be used for an intended purpose. If the fibers are to be used for a toothbrush, then the brush body should be a toothbrush. Additionally a brush body will assist in holding the fibers in place when end rounding.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 6 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 states that the fibers are "simply" placed in an opening in the holder. The examiner is confused as to what "simply" is. Please clarify.

Claim 6 recites the limitation "the side of the holder" in line 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 recites the limitation "the height of the fiber cartridge" in line 1-2. There is insufficient antecedent basis for this limitation in the claim.

Additionally, with regards to claim 19, the examiner is confused what the applicant means by the "height of the fiber cartridge are only partly filled". Does this mean that the fiber bundles have a length that is less than the length of the take up opening? Or does this mean that some of the openings are empty? Please clarify.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 3, 4, 12-14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Weihrauch (USPN 5176427).**

Weihrauch teaches a method for manufacturing brushes, whereby bundles of fibers (9) are provided in a brush body (10). The far ends of the fibers are subjected to a processing (1) by bringing them into contact with processing equipment. The fibers and the processing equipment are mutually put into contact while the fibers are held together loosely (figures 5a-5c).

With regards to claim 3, the fibers are held together in a holder (7).

With regards to claim 4, the fibers are simply placed in a holder (col. 6, lines 50-56).

With regards to claim 12, the method for manufacturing brushes is used for rounding off the far ends of the fibers (figures 5a-5c).

With regards to claim 13, a grinding tool is used a processing equipment (1 and 3).

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With regards to claim 14, the method is used for making toothbrushes (col. 1, line 21).

With regards to claim 16, the fiber bundles are attached to a holder (carrier) and which is attached to a brush body (brush) and the fiber bundles are then end rounded directly from the holder (col. 6, lines 53-56).

**Claims 1, 3, 4, 12-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Zahoransky et al. (USPN 5431484).**

Zahoransky teaches a method for manufacturing brushes, whereby bundles of fibers (4) are provided in a brush body (8). The far ends of the fibers are subjected to a processing (11) by bringing them into contact with processing equipment. The fibers and the processing equipment are mutually put into contact while the fibers are held together loosely (figure 1).

With regards to claim 3, the fibers are held together in a holder (10).

With regards to claim 4, the fibers are simply placed in a holder (col. 4, lines 5-7; the fibers are guided into the holder).

With regards to claim 12, the method for manufacturing brushes is used for rounding off the far ends of the fibers (figure 1).

With regards to claim 13, a grinding tool is used a processing equipment (11).

With regards to claim 14, the method is used for making toothbrushes (col. 1, lines 24-26).

With regards to claim 15, a pusher (5) is used in combination with a holder (10) for pushing the fibers in a longitudinal direction.

**Claims 1, 3, 4, 12-15 and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Boucherie (USPN 5728408).**



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Boucherie teaches a method for manufacturing brushes, whereby bundles of fibers (54) are provided in a brush body (84). The far ends of the fibers are subjected to a processing (86, 88) by bringing them into contact with processing equipment. The fibers and the processing equipment are mutually put into contact while the fibers are held together loosely (figure 9).

With regards to claim 3, the fibers are held together in a holder (80).

With regards to claim 4, the fibers are simply placed in a holder (the fibers are guided into the holder as it rotates).

With regards to claim 12, the method for manufacturing brushes is used for rounding off the far ends of the fibers (86).

With regards to claim 13, a grinding tool is used a processing equipment (86, col. 7, lines 20-26).

With regards to claim 14, the method is used for making toothbrushes (col. 1, line 11).

With regards to claim 15, a pusher (not labeled but shown by arrow in figure 9 near reference number 84) is used in combination with a holder (80) for pushing the fibers in a longitudinal direction. The applicant does not specify what the longitudinal direction is in reference to, so the examiner is interpreting the longitudinal direction to be the longitudinal direction of the apparatus from reference number 84 to 88.

With regards to claim 17, bundle of fibers are separated from a fiber stock (84) by means of a holder and temporarily remain in the holder to be processed subsequently.

With regards to claim 18, the holder is a rotating bundle remover (80) and has a plurality of take up openings (82) for receiving fiber bundles.

With regards to claim 19, the take-up openings are partly filled in the holder. Figure 9 shows all but three openings filled.

With regards to claim 20, the processed fiber bundles are released into a cartridge (51).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 2, 5-6, 8, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weihrauch (USPN 5176427).**

Weihrauch teaches all the essential elements of the claimed invention including that the end rounder (1) moves downward (6) to further round the ends of the bristles (figures 5a-5c).

Weihrauch fails to teach having the processing equipment begin with a smaller freedom of movement and then enlarge as time progresses (claim 2, 5, 6, 8, 10). Even though Weihrauch fails to teach the freedom of movement of the bristles is increasing, Weihrauch's invention clearly does this. As shown in figure 5a, first the free ends are at their longest with the most

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amount of movement. In figure 5b, the abrader starts to move downward causing the free ends to have a smaller freedom of movement and then in figure 5c, the abrader is at its lowest with the smallest amount of freedom of movement for the fibers ends. After figures 5a-5c are completed the abrader must be moved back to its original position in order to remove the bristles from the processing equipment. Therefore, the abrader will then move upward until the bristles have the most freedom of movement as shown in figure 5a. This process of getting the abrader back to its original process reads on the claimed invention (claims 2, 5 and 10). When the abrader is moving upward, the distance between the abrader and the side of the holder that the fibers protrude from, is increased also (claims 6 and 8). Therefore, while Weihrauch fails to explicitly state that the abrader is moved so that the spacing is increased between the holder and the abrader and that the freedom of movement of the fibers is increased, it is obvious to one of ordinary skill in the art at the time the invention was made that after the abrader moves downward (figure 5a-5c), the abrader must again move upward (5c-5a). It is inherent that it must move upward after figure 5a-5c, so that after the processing is completed, the end rounded fibers can be removed and a new fiber bundles can be inserted.

**Claims 2, 5-6, 8, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zahoransky et al. (USPN 5431484).**

Zahoransky teaches all the essential elements of the claimed invention including that the free projecting length of the fiber bundle can be adjusted (col. 4, lines 5-15). Zahoransky fails to teach having the processing equipment begin with a smaller freedom of movement and then enlarge as time progresses (claim 2, 5, 6, 8, 10). Zahoransky teaches that the fiber length beyond the holder is adjustable but does not teach the method of having the fiber length increase with

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time (claims 2, 5 and 10). '484 also teaches that while the length of the fibers increase, so does the distance between the abrader and the side of the holder from while the fiber protrude (claims 6 and 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zahoransky so that the fibers start out with a small amount of freedom when in contact with the abrader and gradually increase to a fiber length where the fibers have the most amount of freedom of movement. Zahoransky teaches that the deflection of the fiber length will determine the result of the rounded off ends (col. 4, lines 14-15). Therefore, adjusting Zahoransky's length so that it achieves the claimed invention would allow the fibers to be rounded in the claimed manner. Since the prior art's invention is capable of performing the method as claimed, and is therefore capable of rounding the fibers as claimed, the claimed invention is not patentably distinct from the prior art.

**Claims 2, 5-6, 8, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boucherie ('408) as applied to claim 1 above and further in view of Zahoransky ('484).**

Boucherie teaches all the essential elements of the claimed invention however fails to teach the exact type of end rounding device, one that is adjusts the free length of the fibers, that is used in claims 2, 5-6, 8 and 10. Zahoransky teaches an end-rounding device wherein the free projecting length of the fiber bundle can be adjusted (col. 4, lines 5-15). Zahoransky fails to teach having the processing equipment begin with a smaller freedom of movement and then enlarge as time progresses (claim 2, 5, 6, 8, 10). Zahoransky teaches that the fiber length beyond the holder is adjustable but does not teach the method of having the fiber length increase with time (claims 2, 5 and 10). '484 also teaches that while the length of the fibers increase, so does the distance between the abrader and the side of the holder from while the fiber protrude (claims

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6 and 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zahoransky so that the fibers start out with a small amount of freedom when in contact with the abrader and gradually increase to a fiber length where the fibers have the most amount of freedom of movement. Zahoransky teaches that the deflection of the fiber length will determine the result of the rounded off ends (col. 4, lines 14-15). Therefore, adjusting Zahoransky's length so that it achieves the claimed invention would allow the fibers to be rounded in the claimed manner. Since the prior art's invention is capable of performing the method as claimed, and is therefore capable of rounding the fibers as claimed, the claimed invention is not patentably distinct from the prior art. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the modified end rounder of Zahoransky for the end rounder as taught by Boucherie because both references teach equivalent apparatuses. Both end rounders perform the same function of rounding fibers and therefore are considered interchangeable. Since Boucherie is silent as to what type of end rounder is used, Zahoransky's end rounder could be used in place of Boucherie's to allow different types of end rounding to occur due to the fiber length adjustment of Zahoransky.

**Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zahoransky et al. ('484) as applied to claims 5 and 8, respectively above.**

Zahoransky teaches all the essential elements of the claimed invention however fail to teach that the free length of the fiber is smaller than 1 millimeter. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zahoransky so that the length of the fiber is less than 1 millimeter as stated in claims 7 and 9, since the only difference between the prior art and the claims is a recitation of relative dimensions of the

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claimed device. A method with a device having the claimed relative dimensions would not perform differently than the prior art device and therefore, the method and the claimed device is not patentable distinct from the prior art (MPEP 2144).

**Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weihrauch ('427) or Zahoransky et al. ('484) as applied to claim 5 above and further in view of Boucherie (USPN 6290303).**

Weihrauch and Zahoransky teach all the essential elements of the claimed invention however fail to teach that a push-out element is used to change the free length of the fibers. Boucherie teaches using a push-out element (24) for changing the free length of bristles (4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Weihrauch or Zahoransky so that there is a push-out element is used as taught by Boucherie for pushing the fibers bundles into the holder so that various fiber bundle arrangement can be obtained, such as angled bristles or bristles of various lengths (col. 5, lines 29-41).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Balsis whose telephone number is 571-272-1268. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



SLB  
8/8/06